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Water Supply Outlook for th Wester United



Water Supply Outlook

Published jointly by the National Weather Service NOAA and the Soil Conservation Service USDA following the principal snow survey dates from January 1 through May 1.

Some Basic Data and Streamflow Forecasts prepared by cooperating agencies are presented in this bulletin. These agencies include the Bureau of Reclamation, Corps of Engineers, Forest Service, National Park Service, Geological Survey, British Columbia Ministry of the Environment, and the California Department of Water Resources. Copies of this publication may be obtained on request from National Weather Service, National Oceanic and Atmospher, Administration, Silver Spring, Maryland 20910, Attentio Office of Hydrology, and the Soil Conservation Service, We Technical Service Center, Room 510, 511 N.W. Broadwa Portland, Oregon 97209.

Water Supply Outlook reports prepared by other agencial include a report for California by the Snow Surveys Branc California Department of Water Resources, P.O. Box 38 Sacramento, California 95802 — for British Columbia by the Ministry of the Environment, Water Investigations Brancial Parliament Buildings, Victoria, British Columbia V8V 1X5 — for Yukon Territory by the Department of Indian and Norther Affairs, Northern Operations Branch, 200 Range Road, White horse, Yukon Territory Y1A 3V1 — and for Alberta, Saskatch wan, and N.W.T. by the Water Survey of Canada, Inland Water Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

To Recipients of Water Supply Outlook Reports

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulate during the winter and spring, several months before the snow melts and appears as streamflow. Sinc the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well i advance of its occurrence. Fall precipitation influences the soil moisture conditions prior to formatio of snowpack and explains, in part, the effectiveness of the snowpack in producing runoff. The forecast of natural runoff in this outlook are based principally on measurements of precipitation, snow wate equivalent, and antecedent runoff. Forecasts become more accurate as more of the data affectin runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season fore casts are threfore subject to a greater change than those made on later dates. The report for Wester United States presents a broad picture of water supply outlook conditions, including selected stream flow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Probability Forecasts

Precipitation and snowfall accumulation of known probability as determined by analysis of past record are utilized in the preparation of probability runoff forecasts. The forecasts include an evaluation of the standard error of the prediction model. The forecasts are presented at three levels of probability a follows:

- 1. Most Probable That runoff which is expected to occur if precipitation subsequent to the date o forecast is median.
- 2. Reasonable Maximum —That runoff which is expected to occur if precipitation subsequent to the date of forecast is equal to the amount which is exceeded on the average once in ten years.
- 3. Reasonable Minimum That runoff which is expected to occur if precipitation subsequent to the dates of forecast is equal to the amount which is exceeded on the average nine out of ten years.

RUNOFF FORECASTS AT ALL POINTS ARE FOR FULL NATURAL OR UNIMPAIRED RUNOFF CORRECTED FOR EVAPORATION, UPSTREAM DIVERSIONS, AND ADJUSTED FOR OTHER HYDROLOGIC CHANGES AS THEY ARE DEVELOPED. REFERENCE SHOULD BE MADE TO THE U.S. GEOLOGICAL SURVEY WATER SUPPLY PAPERS FOR DETAILED INFORMATION CONCERNING DIVERSIONS AND ADJUSTMENTS AT THE VARIOUS FORECAST POINTS.

1985 Snowmelt Season as of May 1

WARM AND DRY APRIL WEATHER OVER MUCH OF THE WEST STARTED HEAVY SNOWMELT WHICH SEVERLY DEPLETED SNOWPACKS, CAUSED HIGH STREAMFLOWS, AND LED TO DOWNWARD REVISIONS IN THE SEASONAL FORECASTS. STREAMS IN SOUTHERN COLORADO AND NEW MEXICO WILL PRODUCE MUCH ABOVE NORMAL RUNOFF VOLUMES THIS SEASON.

General Outlook

April weather conditions contributed to further decrease streamflow forecasts over a large portion of the West. Expected volumes are below to much below normal for the Missouri, Great, and California Basins. Also, portions of the Snake and Upper Columbia Basins will receive below normal runoff amounts. Conditions in the Colorado, Arkansas, and Rio Grande Basins were not so bleak, however. Wet April conditions will keep most of these basins above average, especially so in the San Juan and Rio Grande drainages.

A very warm and dry April weather pattern dominated much of the Western U.S. California stations only reported 15 percent of normal precipitation state-wide, with the Missouri, the Great, and much of the Columbia Basins showing similar results. On the other hand, the Colorado, Arkansas, and Rio Grande Basins received above normal precipitation during April. The Rio Grande Basin experienced the wettest April in 40 years.

As previously mentioned, a very warm April has greatly depleted the snowpack throughout the West. The very rapid depletion of the snow caused high runoff in most western streams and rivers during April, with many peaks probably occurring during the month. The only area with a much above normal snowpack is in the high elevation portions of southern Colorado and northern New Mexico, where rapid melting is just getting underway.

The Rio Grande River is going bananas this year and is now expected to produce 195 percent of average seasonal runoff. This is in stark contrast with other major rivers in the West, where forecasts are either staying the same or decreasing. Percent yields from other major rivers are as follows: Snake-98, Missouri-82, Columbia-96, Colorado-145, Arkansas-98, Green-88, North Platte-68, and South Platte-100.

Reservoir storage is good to excellent throughout the West. The way things look in many states, the water users are going to have to rely heavily on this abundance of stored water.

Basin by Basin Summary

SAN JOAQUIN, SACRAMENTO AND NORTH COASTAL BASINS

Following a cool and damp March in much of California, April weather patterns reverted to the dry conditions which have prevailed most of the winter. Statewide precipitation averaged about 15 percent of normal. Only a few sites in the state reported more than an inch of precipitation. Mt. Shasta City and Red Bluff reported their second driest April on record. Several locations in the Southern Sierra and Southern California recorded no rain during the month.

April had very warm temperatures throughout the state, with every reporting station in California recording above normal temperatures for the month. Average temperature anomalies of 3 to 5 degrees were most common for the month. Record April average temperatures were established at Blue Canyon with 53.4 degrees (10.1 degrees above normal) and at Mt. Shasta City with 51.7 degrees (6.1 degrees above normal). The Blue Canyon April average temperature was higher than the normal May average of 51.5 degrees.

As a result of the warm weather, the runoff from the snowpack began earlier than usual giving higher than normal streamflows for the month. However, expected water year streamflow volumes have continued to decrease and are expected to average 63 percent of normal.

COLUMBIA BASIN

The water supply outlook for the Columbia River and Pacific coastal basins calls for near normal runoff volumes this season. The conditions of April boosted forecast volumes in the Canadian portion of the basin and lowered forecast volumes in the Snake River Basin. The forecast for the Columbia River at The Dalles remained

COLUMBIA BASIN -- Continued

Most basin reservoirs will fill, but with continued dry weather and high irrigation demand, it may be difficult to fill the Yakima and Boise reservoir systems.

GREAT BASIN

Below normal April precipitation in the Great Basin combined with very high flows during April, resulted in lower runoff volumes for the May-July period. The dry warm April weather lowered the threat of flooding and minimized the danger of slides.

April precipitation throughout the basin was generally 20-45 percent of normal but increased to 120-170 percent of normal in southern and eastern Utah.

Seasonal precipitation since October 1 is below normal, 50-80 percent, over portions of north-central Utah but increases substantially to more than 150 percent over the southeast portion of the state.

The May I snow measurements reflect the unusually warm weather in April which resulted in a significant decline in the mountain snowpack. Most basin averages declined 10-40 percent from the April 1 readings.

Observed streamflow throughout the Great Basin was much above normal. Most streams had 2-3 times normal flows reflecting the early snowmelt. Many of these streams have already peaked for this season. Since October 1 runoff over most of the Great Basin has been 160-200 percent of normal.

The elevation of the Great Salt Lake on May 1 was 4209.90 feet, an increase of 0.35 feet during April. The Great Salt Lake is 1.80 feet higher than last years May 1 reading and is at its highest level since 1877. The lake should continue to rise slowly, peaking within the next few weeks at a level near or below 4210.20 feet. The peak last year was 4209.25 feet.

Utah Lake on may 1st was 3.28 feet above compromise, a rise of 0.34 feet during April. Utah Lake is very near its peak elevation, within several inches, and should start receding within the next several weeks.

Reservoir storage throughout Utah remains well above average. April month-end contents of 24 reservoirs was about 340,000 acre-feet more than last year at this time.

The flood potential continues to diminish with dry warm weather helping to decrease the snowpack and drying the soils. Many low elevation streams throughout the state have already peaked. High flows from snowmelt runoff are still likely but streams are expected to remain within stream channels. The potential for land slides and earth failures has greatly diminished.

COLORADO BASIN

The water supply outlook for the Upper Colorado Basin is above normal. Forecast flows increased 5 to 15 percent over those issued April 1. Runoff volumes are forecast at 130-170 percent of normal for the May-July period on the San Juan, Dolores, and Gunnison watersheds as well as the Colorado mainstem from Cameo to Lake Powell. The Green River Basin and headwaters of the Colorado changed only slightly.

April precipitation ranged from less than 50 percent of normal on the Upper Green River in Wyoming to about 200 percent of average over much of the Colorado mainstem and San Juan Basin. Some areas along the Continental Divide were near normal. Seasonal precipitation was quite varied over the Upper Colorado Basin. Portions of the Upper Green River in Wyoming received less than 50 percent with a vast majority of the Colorado drainage 110 to 140 percent with some stations exceeding 150 percent in the San Juan and Dolores watersheds.

The May 1 mountain snowpack as compared to April 1 declined to about 65 percent of average in the Upper Green, changed only slightly over Colorado mainstem, but increased significantly in the San Juan Basin.

Runoff during April was generally at record proportions; for the month. Warm weather resulted in an early snowmelt regime with many drainages having flows more than 200 percent of normal. The April inflow to Navajo Reservoir was a record amount at 340,000 acre-feet, while the inflow to Lake Powell was 2.55 million acre-feet, second highest on record.

Reservoir storage remains high. The combined storage of ten major reservoirs above Lake Powell is 6.1 million acre-feet, about 330,000 acre-feet more than last year at this time. Storage in the four Salt River reservoirs in Arizona is 1.7 million acre-feet, almost 100 percent of capacity. Current storage in Lake Powell is 22.5 million acre-feet, 300,000 acre-feet more than last year.

Some flooding in low lying and flood prone areas may occur on the San Juan, Dolores, and Gunnison drainages as well as the Colorado mainstem below the confluence with the Gunnison River.

RIO GRANDE BASIN

Above normal precipitation was reported over the entire Rio Grande Basin during the month of April, increasing the total seasonal streamflow forecasts at some forecast points by 10 to 20 percent from April 1 predictions. Forecast totals in the Colorado portion of the basin are 107 to 160 percent of average, and in New Mexico 110 to 215 percent of average.

During the last week of April, significant precipitation was observed at many basin locations pushing monthly totals above 200 percent of normal throughout the basin. Overall, it was one of the wettest Aprils in the last 40 years in New Mexico.

Above normal snowfall was reported during the month of April in the higher elevation areas, particularly the San Juan Mountains of southern Colorado. The basin snowpack in Colorado is now 153 percent of average which is about 20 percent higher than last year at this time. In New Mexico, above normal temperatures around the middle of the month resulted in melting of a large percentage of the snowpack. This produced very good runoff and much above normal streamflows for the month.

Reservoir storage increased at most of the basin lakes during the month, and total storage is well above average. At Elephant Butte and Caballo Reservoirs, water in storage now totals about 1.9 million acre-feet which is the highest amount since the record high of 2.3 million acre-feet in 1942.

ARKANSAS BASIN

The Arkansas River Basin water supply outlook indicates near normal runoff. Predicted streamflow volumes range from 105 to 115 percent of the 20-year (1961-1980) average.

Several moderate storms during April produced above normal precipitation, with the majority of the basin receiving 150 percent of normal. Seasonal totals (October through April) range from near normal in the northern valleys to near twice normal further south and east along the Sangre De Cristo Mountains and the southeastern quarter of Colorado.

May I snowpack increased slightly from a month ago at a few of the higher elevation snow courses. Snowpack at the low and middle elevation snow courses decreased dramatically due to above normal temperatures during the month of April. North and west of Salida in the Sawatch mountains, May I highs were noted at Porphyry Creek and Twin Lakes tunnel with averages of 110 to 120 percent of normal. At lower elevations, the snowpack is virtually non-existent due to above normal temperatures in April.

STREAM ANU STATION	FORECAST		FORECASTS		56466	20 YEAR (1961-8 AVERAGE RUNOFF
SING IN THE STATE OF THE STATE	PERIOD	MOST PRO (1000AF) (PER	BABLE RCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	(1000 AF)
SACR	AMENTO AN	ID NORTH CO	DASTAL BA	SINS		
TRINITY RIVER CLAIR ENGLE LAKE INFLOW, CA	OCT-SEP	850	ं. 62	70	56	1365
SACRAMENTO RIVER	OCT-SEP	500	59	70	50	844
MC CLOUD RIVER		_		·	-	_
PIT RIVER	OCT-SEP	900	70	77	64	1280
SHASTA RESERVOIR ABV, CA SACRAMENTO RIVER		2250	69	73	66	3266
SHASTA RESERVOIR INFLOW, CA RED BLUFF NR, CA NORTH FORK FEATHER RIVER	OCT-SEP OCT-SEP	4000 5300	66 60	70 66	64 55	6078 8808
PRATTVILLE, NR, CA BIG BAR, CA FEATHER RIVER	OCT-SEP OCT-SEP	580 1600	73 62	77 68	70 57	793 2572
	OCT-SEP	2800	61	68	56	4613
GOODYEARS BAR BLO, CA SOUTH YUBA RIVER	OCT-SEP	350	62	71	55	564
LANGS CROSSING, CA	OCT-SEP	250	70	82	61	358
YUBA RIVER SMARTVILLE, CA	OCT-SEP	1500	64	71	59	2355
MIDDLE FORK AMERICAN RIVER AUBURN NR, CA	OCT-SEP	680	64	76	56	1066
SILVER CREEK UNION VALLEY RES INFLOW, CA	-	110	65	76	56	
CAMINO DIV DAM BLO, CA SOUTH FORK AMERICAN RIVER	OCT-SEP	210	67	79	57	170 314
CAMINO NR, CA AMERICAN RIVER	OCT-SEP	500	61	71	54	822
FOLSOM RESERVOIR INFLOW, CA	OCT-SEP	1700	65	72	61	2623
ממוזדם ואפשע	SAN	JOAQUIN BA	ASIN			
KERN RIVER KERNVILLE NR, CA	OCT-SEP	400	66	79	54	610
ISABELLA DAM BLO, CA BAKERSFIELD NR, CA TULE RIVER	OCT-SEP OCT-SEP	450 480	60 61	69 77	57 53	749 783
SUCCESS RESERVOIR INFLOW, CA KAWEAH RIVER	OCT-SEP	70	48	69	31	147
TERMINUS RESERVOIR INFLOW, CA	OCT-SEP	280	62	72	56	453
NORTH FORK KINGS RIVER CLIFF CAMP NR, CA	OCT-SEP	200	68	80	62	292
KINGS RIVER PINE FLAT DAM INFLOW, CA	OCT-SEP	1150	67	74	63	
SOUTH FORK SAN JOAQUIN RIVER FLORENCE LAKE NR, CA	OCT-SEP	180	68	79	57	
BIG CREEK HUNTINGTON LAKE BLO, CA	OCT-SEP	75	54	68	43	
SAN JOAQUIN RIVER BIG CREEK ABV, CA MILLERTON LAKE INFLOW, CA	OCT-SEP OCT-SEP	1000 1200	72 66	77 74	69 62	
MERCED RIVER POHONO BR, YOSEMITE NR, CA		320 600				
TUOLUMNE RIVER	OCT-SEP	560	72	81	70	760
DON PEDRO RES INFLOW, CA MIDDLE FORK STANISLAUS RIVER	OCT-SEP	1250	73 66	73	70 62	762 1885
	OCT-SEP	320	67	77	59	480
MELONES RESERVOIR INFLOW, CA NORTH FORK MOKELUMNE RIVER	OCT-SEP	700	61	70	56	1142
	OCT-SEP	260	73	99	45	358
PARDEE RESERVOIR INFLOW, CA	OCT-SEP	470	64	73	59	735
COSUMNES RIVER MICHIGAN BAR, CA	OCT-SEP	170	47	60	38	365
COLUMBIA DIVED	COI	LUMBIA BASI	N			
COLUMBIA RIVER BIRCHBANK, BC	APR-SEP	40900	92	109	74	44610
INTERNATIONAL BOUNDARY GRAND COULEE, WA	APR-SEP	56200 61000	91 91	108	75	61430
ROCK ISLAND DAM BLO, WA THE DALLES NR, OR	APR-SEP APR-SEP APR-SEP APR-SEP	66700	92	101 103	82 80	66840 72780
			`96	109	83	101000
LIBBY RESERVOIR INFLOW, MT LIBBY, MT LEONIA, ID	apr-sep Apr-sep	5860 6230 7320	83 83 85	103 102	64 64	7041 7503 8602

STREAM AND STATION	FORECAST			TS THIS YEAR		20 YEAR (1961-80)
	PERIOD	_{ (1000AF)	PROBABLE (PERCENT OF AVG.	REASONABLE MAX	(. REASONABLE MIN. .)(PERCENT OF AVG.)	AVERAGE RUNOFF (1000 AF)
CI ADV DODY	COLUMB	IA BASIN	Continued	A CHICATOL AVO	MILKELINI OFAVG.)	
CLARK FORK MISSOULA ABV, MT	MAY-SEP	1070	į.			
MISSOULA BLO, MT ST. REGIS, MT	APR-SEP	1270 2710	80. 82	116 105	44 58	1590 3319
PLAINS NR. MT	APR-SEP APR-SEP	3690 10800	84 89	104	63	4411
WHITEHORSE RAPIDS, ID PEND OREILLE RIVER	APR-SEP	12200	90	104 104	74 75	12150 13570
PEND OREILLE LAKE IN, ID BOX CANYON BLO, WA	APR-SEP	13800	91	106	77	
BLACKFOOT RIVER BONNER NR, MT	APR-SEP	14000	91	106	76	15150 15420
BITTERROOT RIVER	APR-SEP	797	80	109	50	999
DARBY NR, MT AT MOUTH, MT	APR-SEP APR-SEP	470	81			580
N.F. FLATHEAD RIVER COLUMBIA FALLS NR, MT		1250	83	120	47	1504
FLATHEAD RIVER	MAY-SEP	1520	87	116	59	1742
COLUMBIA FALLS, MT FLATHEAD LAKE INFLOW, MT	MAY-SEP MAY-SEP	4900	87	107	67	5604
M.F. FLATHEAD RIVER WEST GLACIER NR, MT		5740	88	108	68	6522
S.F. FLATHEAD RIVER	MAY-SEP	1500	88	117	59	1702
HUNGRY HORSE RES INFLOW, MT PRIEST RIVER	MAY-SEP	1810	89	110	68	2029
PRIEST RIVER, ID KETTLE RIVER	APR-SEP	899	102	132	71	
LAURIER NR, WA COEUR D'ALENE RIVER	APR-SEP	1520	83	_	,	885
ENAVILLE, ID	MAY-SEP	564	-	109	57	1829
COEUR D'ALENE LAKE IN, ID SPOKANE RIVER	MAY-SEP	2070	102 105	149 140	55 70	554
SPOKANE, WA ST JOE RIVER	MAY-SEP	2260	106	138		1977
CALDER, ID OKANAGAN RIVER	MAY-SEP	1020	100		74	2137
TONASKET NR. WA	APR-SEP			124	77	1019
SIMILKAMEEN RIVER NIGHTHAWK NR, WA		1370	83	104	68	1644
METHOW RIVER PATEROS NR, WA	APR-SEP	1280	88	103	79	1462
STEHEKIN RIVER	APR-SEP	822	84	108	59	980
STEHEKIN, WA CHELAN RIVER	APR-SEP	690	80			860
LAKE CHELAN INFLOW, WA WENATCHEE RIVER	MAY-SEP	893	82	99	<i>(</i> =	
PESHASTIN, WA	MAY-SEP	1370			65	1094
YAKIMA RIVER KEECHELUS LAKE INFLOW, WA	MAY-SEP		90	123	56	1523
PARKER NR. WA	MAY-SEP	108 738	95 94	106 106	83	114
KACHESS RIVER	MAY-SEP	1620	95	114	83 76	781 1703
KACHESS LAKE INFLOW, WA	MAY-SEP	93	95	107	83	98
TUM LAKE INFLOW, WA IVER	MAY-SEP	379	95	105	85	
NR, WA ≀⊤vr:R	MAY-SEP	750	102	124		400
KE INFLOW, WA	MAY-SEP	126			81	733
	Y-SEP		99	118	80	127
	r-oer	220	103	122	84	214
		37	95	136	54	39
WETTER 112 2011, 1D	APK-SEP	750	85	97	74	880
HEISE NR, ID SHELLEY NR, ID	MAY-SEP	3150 2940	83 79	101 99	65	3793
BLACKFOOT NR, ID AMERICAN FALLS RES IN, ID	APR-JUL MAY-JUL	3630 3240	82	101	59 64	3724 4402
KING HILL, ID	APR-JUL APR-JUL	2390 2820	78	98 106	62 50	4051 3063
MURPHY NR, ID WEISER, ID	APR-JUL APR-JUL	3100,	101 107	129 140	86 88	2788
HELLS CANYON, ID LOWER GRANITE RES IN, WA	APR-JUL	5420 5950	103 101	144	71	2893 5254
REY'S RIVER	APR-JUL	21700	98	139 122	71 77	5902 22140
PALISADES ABV, WY SALT RIVER	APR-SEP	300	76			
ETNA NR, WY ENRYS FORK	APR-SEP	311	79	05	(0	393
ASHTON NR. ID	MAY-SEP	490		95	62	394
REXBURG NR, ID	MAY-SEP	1030	80 78	105 105	83 75	610
		4 ·				1317

STREAM AND STATION	FORECAST		20 YEAR (1961-8 AVERAGE RUNOFF			
	PERIOD			REASONABLE MAX PERCENT OF AVG	(.REASONABLE MIN. .)(PERCENT OF AVG.)	(1000 AF)
FALLS RIVER	COLUMB	IA BASIN				
SQUIRREL NR, ID TETON RIVER	APR-JUL	345	- 94	105	83	366
ST. ANTHONY NR, ID BIG LOST RIVER	APR-SEP	428	92	103	81	465
MACKAY RESERVOIR INFLOW, ID LITTLE LOST RIVER	APR-SEP	129	70	104	36	184
HOWE NR, ID PORTNEUF RIVER	APR-SEP	38	90		-	42
TOPAZ, ID	MAR-SEP	94	92	92	92	102
GOOSE CREEK OAKLEY RES INFLOW, ID	MAY-SEP	17	76	109	41	
SALMON FALLS CREEK SAN JACINTO NR, NV	MAY-SEP	45	74	133	34	23
LITTLE WOOD RIVER CAREY NR, ID	MAY-SEP	46	61	97	26	61
BIG WOOD RIVER HAILEY, ID	APR-SEP	175	68			75 .
MAGIC RESERVOIR INFLOW, ID BRUNEAU RIVER	APR-SEP	268	87	110 129	60 45	258 307
HOT SPRING NR, ID OWYHEE RIVER	MAY-SEP	123	70	123	20	176
GOLD CREEK NR, NV OWYHEE RES INFLOW, OR	MAY-JUL MAY-JUL	27	113	175	63	11
BOISE RIVER TWIN SPRINGS NR, ID	APR-JUL	130	70	194	30	187
BOISE NR, ID S.F. BOISE RIVER	MAY-JUL	557 858	86 76	102 100	. 69 . 52	650 1131
ANDERSON RANCH RES IN, ID MALHEUR RIVER	APR-JUL	457	83	102	64	551
DREWSEY NR, OR N.F. MALHEUR RIVER	MAY-JUL	25	76	185	46	33
BEULAH RESERVOIR INFLOW, OR	MAY-JUL	27	75	136	45	36
PAYETTE RIVER HORSESHOE BEND NR, ID	MAY-SEP	1230	82	102	61	
DEADWOOD RIVER DEADWOOD RES INFLOW, ID	APR-JUL	120	86	103	_	1504
N.F. PAYETTE RIVER CASCADE RES INFLOW, ID	MAY-SEP	381	82	98	69 65	140
WEISER RIVER WEISER NR, ID	MAY-JUL	188	71	•	65	466
BURNT RIVER HEREFORD NR, OR	APR-SEP	50		119	24	263
POWDER RIVER SUMPTER NR, OR	APR-JUL	68	147	197	97	34
EAGLE CREEK SKULL CREEK ABV, OR			121	152	91	56
IMNAHA RIVER IMNAHA, OR	APR-SEP	208	113			184
SALMON RIVER SALMON, ID	MAY-SEP	239	96	129	63	249
WHITEBIRD, ID LOSTINE RIVER	APR-JUL APR-JUL	749 5290	83 85	119 100	47 71	899 6211
LOSTINE NR, OR	APR-SEP	114	93		1 -	
GRANDE RONDE RIVER LA GRANDE, OR	APR-SEP	162	100	156	44	123
TROY, OR CLEARWATER RIVER	MAR-JUL	1410	97	124	70	162 1454
OROFINO, ID SPALDING, ID	APR-JUL APR-JUL	4710 7760	96 97	115	77	4917
N.F. CLEARWATER RIVER DWORSHAK RES INFLOW, ID	APR-JUL	2760	98	115	. 79	8000
S.F. WALLA WALLA RIVER MILTON NR, OR	MAY-SEP			114	83	2805
UMATILLA RIVER GIBBON NR, OR		51	98	123	73	52
PENDLETON, OR JOHN DAY RIVER	MAY-SEP MAY-SEP	49 77	104 100	145 156	64 44	47 77
SERVICE CREEK, OR M.F. JOHN DAY RIVER	APR-SEP	1000	131	159	102	764
RITTER, OR N.F. JOHN DAY RIVER	MAY-SEP	• .74	100	138	62	74
MONUMENT NR, OR OCHOGO CREEK	APR-SEP	720	134	134	134	
OCHOCO RES INFLOW, OR	APR-SEP	27	152	240	65	539
CROOKED RIVER PRINEVILLE RES INFLOW, OR	APR-SEP	162	172			18
TUMALO CREEK BEND NR, OR	MAY-SEP	43		240	94	94
SQUAW CREÉK SISTERS NR, OR	MAY-SEP		107	122	92	40
···· , V.	MAI-OFL	46	105	123	86	44

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ARKANSAS BASIN -- Continued

Reservoir storage amounts continue well above average with 406 percent of the long-term average now in sto age. This is about 122 percent more than last year at this time.

MISSOURI BASIN

The May I water supply forecast calls for most streams in the Missouri Basin to receive less runoff than forecast last month as a result of below average April precipitation.

The overall high elevation snowpack in the Missouri Basin is well below average for May 1. The snowpack in the South Platte Basin ranges from 70 to 90 percent of average. The North Platte Basin snowpack ranges from near 85 percent above Seminoe Dam, Wyoming, to 40 percent of average in the Sweetwater Basin. The snowpack in the Yellowstone Basin ranges from 61 percent in the Yellowstone Basin above Billings, Montana, to 38 percent of average in the Powder River Basin. Except for the Marias-Teton-Sun Basins, where the snowpack is 83 percent of average, the Missouri Basin above Fort Peck, Montana, has between 58 and 70 percent of average May 1 snowpack.

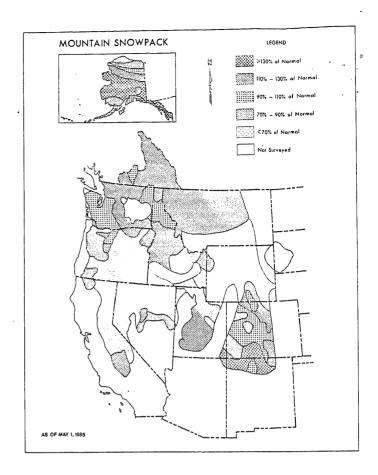
Most of the Missouri Basin received below average April precipitation. Except for the northeastern portion, Montana received below to well below average precipitation. Wyoming also received below to well below average April precipitation. The Platte Basin in Colorado received above average precipitation during April.

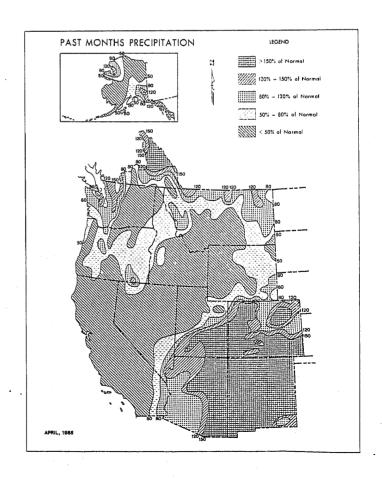
Most streams in the Missouri Basin are forecast to have below average runoff this spring and summer. Streams in the Missouri Basin above Fort Peck, Montana, can expect about 80 percent of average runoff. Streams in the Yellowstone Basin are forecast to have about 60 to 80 percent of average runoff, the Upper North Platte Basin 82 percent of average, the Lower North Platte Basin well below average runoff, and the South Platte Basin between 85 and 100 percent of average.

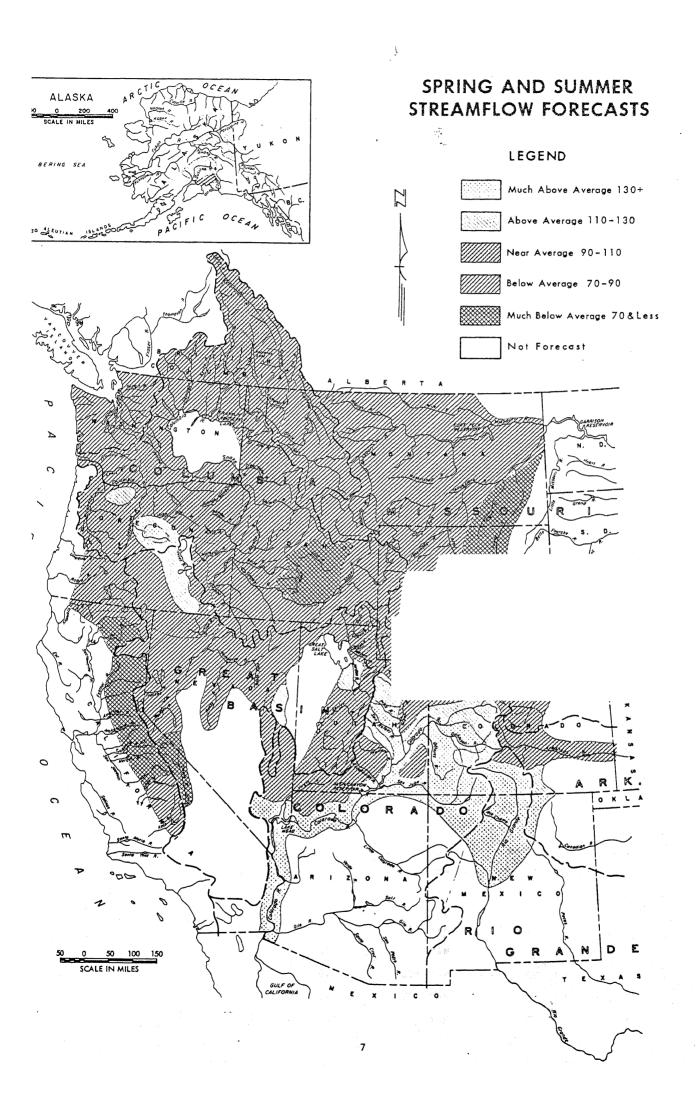
Most reservoirs in the Missouri Basin contain average or above average water for this time of the year. Reservoirs in Montana contain average storage except for Gibson, Pishkun, Willow Creek, Tongue, Sherburne, Fresno and Nelson Reservoirs which all have below average storage. Reservoir storage in Wyoming is above average in the North Platte Basin; average in the Wind, Bighorn Basin; and below average in the Bel Fourche Basin.

ALASKA

Alaska experienced the coldest April on record. Although little new moisture fell during the month, very little snow melted either. The result is almost the entire state south of the Brooks Range is covered by snow far in excess of normal amounts for this time of year. The near maximum of record snowpack in the interior a month ago is now maximum of record in a large belt across the center of the state. The National Weather Service rates this year's potential for flooding during the river ice breakup season as the highest in the last 20 years.







SIKEAMFLOW FORECASIS						
	FORECAST		FORECASTS	THIS YEAR		20 YEAR (1961-80) AVERAGE RUNOFF
STREAM AND STATION	PERIOD	MOST PRO (1000AF) (PER	BABLE CENT OF AVG.)	REASONABLE MAX.[i (PERCENT OF AVG.](PERCENT OF AVG.	(1000 AF)
CO	LUMBIA BASI	N (Cont.) ANI	COASTA	L BASINS		
DESCHUTES RIVER	• .		131.	169	94	80
CRANE PRAIRIE INFLOW, OR BENHAM FALLS, OR	MAY-SEP APR-SEP	105∙ 559	131. 104	109	34	540
MOODY, OR	APR-SEP	1950	104	113	94	1874
LITTLE DESCHUTES RIVER LAPINE NR, OR	MAY-SEP	55	92	118	65	60
CRESCENT CREEK			-	150	95	21
CRESCENT LAKE INFLOW, OR WHITE RIVER	APR-SEP	26	124	152	95	
TYGH VALLEY BLO, OR	MAY-SEP	110	120	148	91	92
MCKENZIE RIVER VIDA NR, OR	APR-SEP	1390	115	115	115	1207
S. SANTIAM RIVER	משט מתא	655	113	113	113	578
WATERLOO, OR N. SANTIAM RIVER	APR-SEP	099	113	113	_	
MEHAMA, OR	APR-SEP	960	115	115	115	838
CLACKAMAS RIVER ESTACADA, OR	APR-SEP	841	110			767
WILLAMETTE RIVER	APR-SEP	4740	102	102	102	4655
SALEM, OR DUNGENESS RIVER						160
SEQUIM NR, WA SKAGIT RIVER	APR-SEP	146	91			
CONCRETE NR, WA	APR-SEP	5590	83	98	69	6724
COWLITZ RIVER MAYFIELD RES INFLOW, WA	MAY-SEP	1370	85	129	41	1617
CASTLE ROCK, WA	MAY-SEP	1750	85	134	36	2058
LEWIS RIVER ARIEL, WA	APR-SEP	1170	94	118	69	1249
N. UMPQUA RIVER	APR-SEP	167	107	117	97	156
LEMOLO LAKE INFLOW, OR ROGUE RIVER			•			642
RAYGOLD, OR WILLIAMSON RIVER	MAY-SEP	663	103	133	74	
SPRAGUE RIVER BLO, OR	MAR-SEP	552	113	146	80	489
KLAMATH RIVER UPPER KLAMATH LAKE IN, OR	APR-SEP	605	124	169	79	489
SPRAGUE RIVER	MAR-SEP	292	103	142	64	284
CHILOQUIN NR, OR		•	_			
BEAR RIVER	(·	REAT BASIN				
UTAH-WYOMING STATE LINE NR	MAY-JUL	110	105	119 131	. 94 . 83	105 116
WOODRUFF NARROWS RES IN UT HARER, ID	MAY-JUL APR-SEP	118 227	102 73	92	. 56	310
SMITHS FORK	ADD GED	93	78	89	69	119
BORDER NR, WY THOMAS FORK	APR-SEP	93	·	09	0,5	
WYOMING-IDAHO STATE LINE NR	APR-SEP	26	74			35
LOGAN RIVER LOGAN NR, UT	MAY-JUL	96	95	109	82	102
BLACKSMITH FORK HYRUM NR, UT	MAY-JUL	37	97	132	68	38
WEBER RIVER				110	87	0.3
OAKLEY NR, UT ROCKPORT RES INFLOW, UT	MAY-JUN MAY-JUN	95 97	102 102	118 126	80	93 95
ECHO RESERVOIR INFLOW, UT	MAY-JUN	121	102	125	80 89	119 230
GATEWAY, UT CHALK CREEK	MAY-JUN	248	108	127	09	
COALVILLE, UT	MAY-JUN	30	100	130	76	30
EAST CANYON CREEK EAST CANYON RES INFLOW, UT	MAY-JUN	22	138	176	119	15.6
SOUTH FORK OGDEN RIVER	MAY-JUN	33	81	110	58	41
HUNTSVILLE NR, UT OGDEN RIVER						
PINE VIEW RES INFLOW, UT JORDAN RIVER	MAY-JUN	63	84	104	66	75
UTAH LAKE INFLOW, UT	MAY-JUL	250	151	182	120	166
SPANISH FORK CASTILLA, UT	MAY-JUL	99	121	140	106	82
PROVO RIVER HAILSTONE NR, UT	MAY-JUL	87	93	112	76	94
DEER CREEK RES INFLOW, UT		95	98	121	75	97
AMERICAN FORK AMERICAN FORK NR, UT	MAY-JUL	32	113	127	102	28
LITTLE COTTONWOOD CREEK						
SALT LAKE CITY NR, UT BIG COTTONWOOD CREEK	MAY-JUL	36	100	108	94	36
SALT LAKE CITY NR, UT	MAY-JUL	41	124	133	112	33
MILL CREEK SALT LAKE CITY NR, UT	MAY-JUL	6.3	124	135	112	5.1
		_				

STREAMFIOW FORFCASTS

	FORECAST		20 YEAR (1961-80			
STREAM AND STATION	PERIOD	MOS	T PROBABLE	REASONABLE MAX G.) (PERCENT OF AVG.	REASONABLE MIN	AVERAGE RUNOFF (1000 AF)
				3.) (PERCENT OF AVG.	PERCENT OF AVG.	(1000 At)
PARLEYS CREEK	GREAT	BASIN	Continued			
SALT LAKE CITY NR, UT	MAY-JUL	13.0	116	143	89	11.2
SIX CREEKS		•		_		- 1.
SALT LAKE CITY NR, UT	MAY-JUL	105	111	123	100	94
SEVIER RIVER HATCH, UT	MAY-JUL	50	121	150	100	42
KINGSTON NR, UT	MAY-JUL	35	154	217	100	22
PIUTE RESERVOIR INFLOW, UT	MAY-JUL	46	138	204	78	33
IN-SIGURD TO GUNNISON, UT	MAY-JUL	85	400	495	315	21
GUNNISON NR, UT	MAY-JUL	100	240			42
EAST FORK SEVIER RIVER	MAN TIIT	12.0	104	1 (0	<i>C</i> II	10 5
KINGSTON NR, UT BEAVER RIVER	MAY-JUL	13.0	104	168	64	12.5
BEAVER NR, UT	MAY-JUL	23	111	145	77	21
COAL CREEK		-3			• •	
CEDAR CITY NR, UT	MAY-JUL	14.8	96	129	75	15.4
HUMBOLDT RIVER						000
PALISADE, NV	APR-JUL	235	102			230
COMUS,NV NORTH FORK HUMBOLDT RIVER	APR-JUL	190	110			173
HALLECK NR, NV	APR-JUL	35	100			35
SOUTH FORK HUMBOLDT RIVER		3,7	200			3,7
ELKO NR, NV	APR-JUL	78	104	•		75
MARTIN CREEK						
PARADISE VALLEY NR, NV	APR-JUL	19	119			16
DONNER UND BLITZEN RIVER FRENCHGLEN NR, OR	MAY-JUL	45	107			42
CHEWAUCAN RIVER	MW I-0 OF	45	107			42
PAISLEY NR, OR	MAR-JUL	85	102	135	70	83
SILVIES RIVER		_		-37	, -	- 2
BURNS NR, OR	APR-SEP	101	131	186	77	77
DEEP CREEK	MAY TIT	lı a	7.00			1.0
ADEL ABV, OR LITTLE TRUCKEE RIVER	MAY-JUL	43	100			43
BOCA ABV, CA	APR-JUL	75	81			93
TRUCKEE RIVER	MIN OOL	1 2	0.1))
LAKE TAHOE INFLOW	APR-JUL	135				170
LAKE TAHOE STAGE RISE *	APR-HIGH	1.10				1.39
FARAD, CA	APR-JUL	225	84			269
EAST CARSON RIVER	ADD TILL	165	88			107
GARDNERVILLE NR, NV WEST CARSON RIVER	APR-JUL	165	00			187
WOODFORDS, CA	APR-JUL	45	85			53
CARSON RIVER		.,	• • • • • • • • • • • • • • • • • • • •			75
FORT CHURCHILL NR, NV	APR-JUL	140	84			166
CARSON CITY NR, NV	APR-JUL	150	82			ļ82
EAST WALKER RIVER	ADD AITO	cc	0.5			
BRIDGEPORT NR, CA WEST WALKER RIVER	APR-AUG	55	83			66
L.WALKER BLO COLEVILLE NR, CA	APR-JUL	130	88			148
,,,,,,,,,,		_				140
	CC	LORADO	BASIN			
COLORADO RIVER						
LAKE GRANBY INFLOW, CO HOT SULPHUR SPRINGS, CO DOTSERO NR, CO GLENWOOD SPRINGS BLO, CO	APR-SEP	219	-			
DOTSERO NR CO	APR-SEP	430 17	1			
GLENWOOD SPRINGS BLO. CO	APR-SEP	2				
CAMEO NR, CO	APR-SEP	2				
CAMEO NR, CO UNADJ	APR-SEP APR-SEP	2				
CISCO NR, UT	APR-JUL APR-JUL	5				
	APR-JUL	10				
FRASER RIVER WINTER PARK NR, CO	100 day					
PARSHALL NR, CO	APR-SEP					
BLUE RIVER	021					
DILLON RESERVOIR INFLOW, CO GREEN MOUNTAIN RES IN, CO	APR-SEP					
GREEN MOUNTAIN RES IN, CO	APR-SEP					
EAGLE RIVER	ADD OFF					
GYPSUM BLO, CO ROARING FORK	APR-SEP					
	APR-SEP					
PLATEAU CREEK						
CAMEO NR, CO	APR-SEP					
TAYLOR RIVER		* · *				
TAYLOR PARK RES INFLOW, CO	APR-SEP					
TAYLOR PARK RES INFLOW, CO ALMONT, CO GUNNISON RIVER	APR-SEP					
GUNNISON RIVER BLUE MESA INFLOW, CO GRAND JUNCTION NR, CO EAST RIVER ALMONT. CO	משם מפת	,				
BLUE MESA INFLOW, CO	APR-SEP	. 1				
EAST RIVER	AL N-OFF	. 4				
ALMONT, CO	APR-SEP					

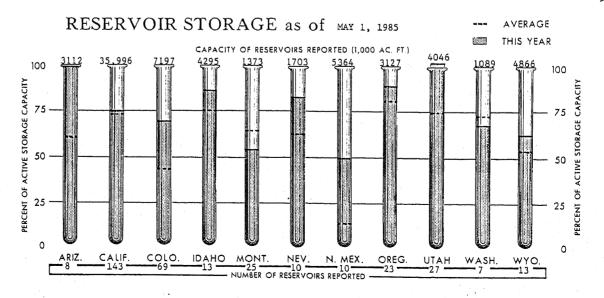
	FORECAST		FORECAST	S THIS YEAR	Inche Children Child	20 YEAR (1961- AVERAGE RUNOF
stream and station	PERIOD	MOST PRO	OBABLE ERCENT OF AVG.	REASONABLE MAX PERCENT OF AVG	. REASONABLE MIN. . (PERCENT OF AVG.)	(1000 AF)
	COLO	RADO Con				
COMPAHGRE RIVER		170 ·	127	143	114	134
COLONA, CO DELTA, CO	APR-SEP APR-SEP	175	136	151	121	129
LORES RIVER	APR-SEP	360	141	161	123	256
DOLORES, CO IN MIGUEL RIVER				100	147	168
NATURITA, GO REEN RIVER	APR-SEP	280	167	192	•	
WARREN BRIDGE, WY	APR-SEP	261 750	80 86	87 100	72 72	326 869
FONTENELLE RES INFLOW, WY GREEN RIVER, WY	APR-JUL APR-SEP	809	75		·	1079
FLAMING GORGE INFLOW, UT	APR-JUL APR-JUL	1100 3250	88 108	106 127	72 89	1248 3016
GREEN RIVER, UT G SANDY RIVER					-	61
BIG SANDY NR, WY W FORK	APR-SEP	50	82			
BIG PINEY, WY	APR-SEP	300	67	79	57	448
NE CREEK FREMONT LAKE ABV, WY	APR-SEP	100	83	90	77	120
NRYS FORK MANILA, UT	APR-SEP	60	125	154	103	48
MPA RIVER		300	106	120	91	284
STEAMBOAT SPRINGS, CO HAYDEN NR, CO	APR-SEP APR-SEP	725	104	119	90	696
MAYBELL NŔ, CO K RIVER	APR-SEP	925	97	111	83	956
CLARK, CO	APR-SEP	195	94	106	83	207
TTLE SNAKE RIVER DIXON NR, WY	APR-SEP	294	92			320
LILY NR, CO	APR-SEP	328	92	110	76	357
HLEY CREEK VERNAL NR, UT	MAY-JUL	60	121	140	105	49
CK CREEK MOUNTAIN HOME NR, UT	MAY-JUL	94	106	121	94	89
ST FORK DUCHESNE RIVER		-	113	120	100	
HANNA, UT CHESNE RIVER	MAY-JUL	27	113	130	102	24
TABIONA NR, UT DUCHESNE, UT ABV KNIGHT DIV	MAY-JUL MAY-JUL	100 185	105 106	117 120	93 93	95 175
MYTON, UŤ	MAY-JUL	242	131	157	101	185
RANDLETT, UT RAWBERRY RIVER	MAY-JUL	314	135	•		233
STRAWBERRY RES INF, UT	MAY-JUL	55	129	148	110	43 48
DUCHESNE, UT STARVATION RES INFLOW, UT	MAY-JUL MAY-JUL	58 58	121 122	151	97	48
KE FORK MOON LAKE RES INFLOW, UT	MAY-JUL	74	110	126	95	67
IITE RIVER					• •	·
MEEKER NR, CO WATSON NR, UT	APR-SEP APR-SEP	289 450	95 140	108 154	83 127	304 322
NTA RIVER NEOLA NR, UT	MAY-JUL	•				
HITEROCKS RIVER		97	119			81
WHITEROCKS NR, UT RICE RIVER	MAY-JUL	66	119			56
SCOFIELD RES INFLOW, UT OTTONWOOD CREEK	MAY-JUL	40	120	138	108	33
ORANGEVILLE NR, UT	MAY-JUL	57	132			43
INTINGTON CREEK HUNTINGTON NR, UT	MAY-JUL	60	136	152	122	
N JUAN RIVER PAGOSA SPRINGS, CO					122	44
NAVAJO RESERVOIR INFLOW, NM	APR-SEP APR-JUL	315 1300	143 178	158 207	131 155	220 729
FARMINGTON, NM BLUFF NR, UT	APR-SEP	1850	168	196	146	1100
CEDRA RIVER	APR-JUL	1750	176	207	151	995
ARBOLES NR, CO AVAJO RIVER	APR-SEP	340	151	165	139	225
EDITH, CO DS PINOS RIVER	APR-SEP	100	189	215	168	53
VALLECITO RES INFLOW, CO	APR-SEP	300	137	151	127	219
NIMAS RIVER DURANGO, CO	APR-SEP	650		_		
LORIDA RÍVER BONDAD NR, CO		-	142	160	127	458
A PLATA RIVER	APR-SEP	50	134	153	121	37
HESPERUS, CO ITTLE COLORADO RIVER	APR-SEP	35	133	156	122	26
LYMAN ABV, AZ			1.81			

STREAM AND STATION	FORECAST		20 YEAR (1961-80			
	PERIOD	MOST PRO (1000AF) (PE	BABLE RCENT OF AVG.)	REASONABLE MAX (PERCENT OF AVG.	REASONABLE MIN. (PERCENT OF AVG.)	AVERAGE RUNOFF (1000 AF)
	COLOF	RADO Conti	nued			
CHEVELON CREEK WINSLOW NR, AZ CLEAR CREEK WINSLOW NR, AZ VIRGIN RIVER	• •	٠				
HURRICANE, UT GILA RIVER GILA NR, NM VIRDEN NR, NM SOLOMON NR, AZ	MAY-JUN	. 40	133	193	90	30
CALVA, AZ SAN FRANCISCO RIVER GLENWOOD NR, NM CLIFTON, AZ SALT RIVER SALT AT INTAKE, AZ						
ROOSEVELT NR, AZ TONTO CREEK ROOSEVELT NR, AZ VERDE RIVER						
HORSESHOE DAM ABV, AZ	510	004110504	51A1			
RIO GRANDE	RIO	GRANDE BAS	SIN			
THIRTY MILE BRIDGE, CO WAGON WHEEL GAP, CO DEL NORTE NR, CO OTOWI BRIDGE, NM SAN MARCIAL, NM	APR-SEP APR-SEP APR-SEP MAR-JUL MAR-JUL	189 435 745 1025 820	150 140 151 171 195	175 174 184 250	105 105 105 100 100	126 310 494 600 420
SOUTH FORK RIO GRANDE SOUTH FORK, CO	APR-SEP	200	157	181		
SAGUACHE CREÉK SAGUACHE NR, CO	APR-SEP	32		_	114	127
ALAMOSA CREEK TERRACE RESERVOIR INFLOW, CO	APR-SEP	102	107	167	67	30
CONEJOS RIVER MOGOTE NR, CO	APR-SEP		155	182	121	66
CULEBRA CREEK SAN LUIS, CO	APR-SEP	302	155	185	113	195
COSTILLA CREEK COSTILLA NR, NM	MAR-JUL	29	161	322	72	18 '
RED RIVER AT MOUTH, QUESTA NR, NM		30	160	310	79	19
RIO HONDO VALDEZ NR, NM	MAR-JUL	33	110	200	83	30
RIO PUEBLO DE TAOS LOS CORDOVAS BLO, NM	MAR-JUL	20	133	253	73	7.5
RIO CHAMA	MAR-JUL	45	167	252	85	
EL VADO RES INFLOW, NM CHAMITA NR, NM RIO OJO CALIENTE	MAR-JUL MAR-JUL	320 435	154 164			
LA MADERA, NM SANTA CRUZ RIVER	MAR-JUL	62	172			
CUNDIYO, NM JEMEZ RIVER	MAR-JUL	22				
JEMEZ NR, NM PECOS RIVER	MAR-JUL					
PECOS NR, NM ANTON CHICO NR, NM GALLINAS CREEK	MAR-JUL MAR-JUL	1				
MONTEZUMA NR, NM	MAR-JUL					
ADVANCA C DIVING	AR	KANSA				
ARKANSAS RIVER GRANITE, CO	APR-SEP	1				
SALIDA, CO CANON CITY PUEBLO ABV, CO GRAPE CREEK	APR-SEP APR-SEP APR-SEP	3 3 3				
WESTCLIFFE NR, CO HUERFANO RIVER	APR-SEP	•				
REDWING NR, CO CUCHARAS RIVER	APR-SEP					
BOYD RANCH, LA VETA NR, CO PURGATOIRE RIVER	APR-SEP					
TRINIDAD, CO	APR-SEP					

STREAM AND STATION	FORECAST			THIS YEAR	laci da di ciri	20 YEAR (1961-80 AVERAGE RUNOFF
	PERIOD		RCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.	IKEASONABLE MII KPERCENT OF AVG	* 4
RED ROCK RIVER	MIS	SSOURI BASI	N			
MONIDA NR, MT BEAVERHEAD RIVER	MAY-SEP	64.5	80			80.7
GRANT, MT	MAY-SEP	97.0	81			120
BARRETTS, MT BIG HOLE RIVER	MAY-SEP	130	80			162
MELROSE NR, MT RUBY RIVER	MAY-SEP	525	78			674
ALDER NR, MT MADISON RIVER	MAY-SEP	70.0	76			91.6
GRAYLING NR, MT MCALLISTER NR, MT	MAY-SEP MAY-SEP	370 620	84 83			440 743
GALLATIN RIVER GALLATIN GATEWAY NR, MT	MAY-SEP	400	78			514
LOGAN, MT MISSOURI RIVER	MAY-SEP	385	71			541
TOSTON, MT FORT BENTON, MT	MAY-SEP MAY-SEP	1782 2800	81 81			2200 3440
VIRGELLE, MT	MAY-SEP	3190	81			3960
LANDUSKY NR, MT FORT PECK DAM BLO, MT	MAY-SEP MAY-SEP	3580 3495	83 82			4300
LAKE SAKAKAWEA INFLOW, ND	MAY-SEP	8360	77			4245 10855
LITTLE MISSOURI RIVER WATFORD CITY NR, ND	FEB-SEP	275	60	91	39	459
SHEEP CREEK WHITE SULPHUR SPRINGS, MT SUN RIVER	MAY-SEP	17.2	85			20.2
GIBSON RES INFLOW, MT BELT RIVER	MAY-SEP	470	87			538
MONARCH NR, MT MARIAS RIVER	MAY-SEP	100	· 79			126
SHELBY NR, MT MUSSELSHELL RIVER	MAY-SEP	375	79			473
HARLOWTON, MT MILK RIVER	MAY-SEP	67.3	80	139	44	84.1
WESTERN CROSSING, MT MILK RIVER, ALBERTA	MAR-SEP MAR-SEP	32.8 44.8	60 55	101 108	45	54.7
EASTERN CROSSING YELLOWSTONE RIVER	MAY-SEP	27.7	50	111	37 33	81.4 55.4
SPRINGS, MT	APR-SEP MAY-SEP	675 1600	82 82			825
TON NR, MT	MAY-SEP	1800	79			1944 2269
T	MAY-SEP	3217	76			4225
MT T	MAY-SEP MAY-SEP	4585 4960	73 72			6273 6921
	MAY-SEP	295	77			385
IT)WSTONE R	MAY-SEP	461	76			606
	MAY-SEP	455	75			606
		85.0 890	80 77			106 1163
		925	76 76			1225
		1390 150	70			1833 214
		53.9	69			77.9
		600	71			844
		94.2	60	100	24	
				100	. 24	157
		38.0 155	71 64	121	28	123 244
		25 . 0	62			40.2
		7.0	66			10.6
		154 185	66 67	138 144	26 23	233 277
		225 583	86 82			262 710
		583 653 680	67 68	: •	<u>.</u>	973 1001

STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST		20 YEAR (1961-80 AYERAGE RUMOFF			
SACAM AND STATION	PERIOD	(1000AF)	PROBABLE (PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.	REASONABLE MIN. (PERCENT OF AVG.)	(1000 AF) .
	MISSOU	RI BASIN	- Continued			
SWEETWATER RIVER	• .	•	72.5			
ALCOVA, WY	APR-SEP	33.2	45	69	28	73.7
LARAMIE RIVER WOODS, WY	APR-SEP	110	83			122
SOUTH PLATTE RIVER	AT II-OUI	110	0,5			132
LAKE GEORGE NR, CO	APR-SEP	45.4	99	169	61	45.9
CHEESMAN LAKE BLO, CO SOUTH PLATTE, CO	APR-SEP APR-SEP	· 94 . 1 197	99	176	57	95.1
NORTH FORK SOUTH PLATTE R	ALU-DEL	191	100	159	67	197
SOUTH PLATTE, CO BEAR CREEK	APR-SEP	80.4	105	144	82	76.6
MORRISON, CO CLEAR CREEK	APR-SEP	25.8	90			28.7
GOLDEN NR, CO ST. VRAIN CREEK	APR-SEP	106	83			127
LYONS, CO MIDDLE BOULDER CREEK	APR-SEP	55.0	70			78.8
NEDERLAND, CO SOUTH BOULDER CREEK	. APR-SEP	30.0	82	108	71	36.5
ELDORADO SPRINGS NR, CO BIG THOMPSON RIVER	APR-SEP	36.1	86	131	73	42.1
ESTES PARK, CO	APR-SEP	66.3	85	110	79	79 0
DRAKE, CO CACHE LA POUDRE RIVER	APR-SEP	97.0	85	110	19	78.0 114
FT. COLLINS NR, CO	APR-SEP	230	86			268
ST. MARY RIVER	SASK	ATCHEWAR	N BASIN			
BABB NR, MT	MAY-SEP	432	93			465
YUKON RIVER		ALASKA				
EAGLE, AK	APR-JUL	44960	106			
STEVENS VILLAGE, AK SALCHA RIVER	APR-JUL	57800	126 120			35790 48330
SALCHAKET NR, AK CHENA RIVER	APR-JUL	880	124			708
FAIRBANKS, AK LITTLE CHENA RIVER	APR-JUL	650	121			535
FAIRBANKS, AK SHIP CREEK	APR-JUL	101	125			81
ANCHORAGE NR, AK N.F. CAMPBELL CREEK	APR-JUL	64	103			62
ANCHORAGE NR, AK ANCHOR RIVER	APR-JUL	4.6	96			4.8
ANCHOR POINT NR, AK LITTLE SUSITNA RIVER	APR-JUL	75.5	93			81
PALMER NR, AK SUSITNA RIVER	APR-JUL	114	124			92
GOLD CREEK, AK TERROR RESERVOIR INFLOW	APR-SEP	6627	112			5919
KODIAK ISLAND, AK	MAY-SEP	45.2	80			56.5



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SOIL CONSERVATION SERVICE

State Snow Survey Supervisors

Room 129. 2221 E. Northern Lights Blvd., Anchorage, AK 95508

201 E. Indianola, Suite 200, Phoenix, AZ 85012

2490 W. 26th Ave., Bldg. A, 3rd Floor, Denver, CO 80211 (Includes New Mexico)

Room 345, 304 N. 8th St., Boise, ID 83702

10 E. Babcock, Room 443, Fed. Bldg., Bozeman, MT 59715

50 South Virginia St., Reno, NV 89505

1220 S.W. Third Ave., Portland, OR 97204

4420 Fed. Bldg., 125 So. State ST., Salt Lake City, UT 84138

360 U.S. Courthouse, Spokane, WA 99201

100 E. "B" St., Casper, WY 82601

NATIONAL WEATHER SERVICE .

River Forecast Center Offices

Fed. Bldg. & Courthouse, 701 C St., Box 23, Anchorage, AK 99513

819 Taylor St., Rm. 10A02, Fort Worth, TX 76102

Rm. 1715A, 601 E. 12th St., Kansas City, MO 64106

121 Customhouse, Portland, OR 97209

1641 Resources Building, 1416 - 9th St., Sacramento, CA 95814

337 No. 2730 West, Executive Terminal Bldg., Salt Lake City, UT 84116

Room 201, General Aviation Bldg, International Airport, Tulsa, OK 74115